

ZAVRELIA BRAGREMIA SP. NOV. FROM CHINA (DIPTERA, HIRONOMIDAE, TANYTARSINI)

GUO Yir Hong^{1,2}, WANG Xir Hua^{1*}

1. Life Science College, Nankai University, Tianjin 300071, China

2. Department of Vector Biology and Control, National Institute of Communicable Disease Control and Prevention, Chinese Centre for Disease Control and Prevention, PO Box 5, Changping, Beijing, 102206, China

Abstract *Zavrelia bragremia* sp. nov. from Southern China is described. It differs from all known species in the genus by lack of long median setae on the anal tergite. The generic diagnosis of the genus is emended to accommodate the new species.

Key words Chironomidae, *Zavrelia*, new species, Oriental, China.

1 Introduction

Kieffer (in Bause 1913) erected the genus *Zavrelia* (the type species *Z. pentatoma*). Up to date, 7 species in the genus have been recorded in the world. Most of species occurred in Holarctic Region, with the only exception of one species (*Z. kiribiensis*) recorded from the Afrotropical Region and one species (*Z. clinovolsella*) from Oriental China (Tokunaga, 1938; Freeman, 1958; Lehmann, 1981; Granston *et al.*, 1989; Oliver *et al.*, 1990; Sasa & Suzuki, 1999; Sæther *et al.*, 2000; Guo & Wang, 2004).

Based on a specimen from Sichuan Province, an additional new species from Southern China is described in this paper.

Guo and Wang (2004) provided a key to males of *Zavrelia* in the world. It includes the species *Z. kibumensis* (Tokunaga). According to personal communication with Dr. Makarchenko, the species should be replaced in the genus *Neozavrelia* as a new combination because the species has digitus in hypopygium, which is common in *Neozavrelia*, while males of *Zavrelia* lacking digitus. The present new species *Z. bragremia* sp. nov. will fall in couplet 3 in the key by Guo and Wang (2004) and described as lack of long median setae in the anal tergite which will separate it from all the other species in the genus.

2 Materials and Methods

The morphological nomenclature follows Sæther (1980) with the additions and corrections given by Sæther (1990). The material examined was mounted on slides following the procedure outlined by Sæther (1969). Type specimen is deposited in the College of Life Science, Nankai University, China.

3 Species Description

Zavrelia bragremia sp. nov. (Figs 1–3)

Type material. Holotype male, China, Sichuan Province, Emeishan City (29°36' N, 103°29' E), 17 May 1986, WANG Xir Hua (BDN 05486).

Etymology. From Latin, *bra*, hairless, *gronium*, middle, referring to the lack of long median setae in the anal tergite, which is unique in the genus.

Diagnosis. Small body size. Anal tergite bands almost transverse. Anal point triangular, with pointed apex. Transverse sternapodeme without oral projections. Superior volsella oblong. Digitus absent. Anal tergite without median long setae and with two spinulae between anal crests.

Male imago ($n = 1$).

Total length 1.08 mm; wing length 1.04 mm. Total length / wing length 1.04; wing length/length of profemur 2.12.

Coloration. Thorax with yellowish green ground coloration and with brown vittae. Head, antenna and abdomen with brown coloration.

Head. Frontal tubercles absent. Antenna with 10 flagellomeres, AR 0.91. Ultimate flagellomere 290 μm long. Temporal setae including 4 inner verticals. Clypeus with 7 setae. Palpomeres lengths (in μm): 24, 26, 80, 80 and last segment missing.

Wing (Fig. 1). VR 1.41, Cu 520 μm long.

Thorax (Fig. 2). Acrostichals 9; dorsocentrals 7; scutellars 6; prealars 1.

Legs. Front tibial spur 18 μm long. Spurs of middle tibia 22 and 12 μm long, of hind tibia 32 and 18 μm long. Combs of middle tibia composed of 10 and 9 free teeth, of hind tibia of 12 and 12 free teeth. Lengths and proportions of legs (Table 1).

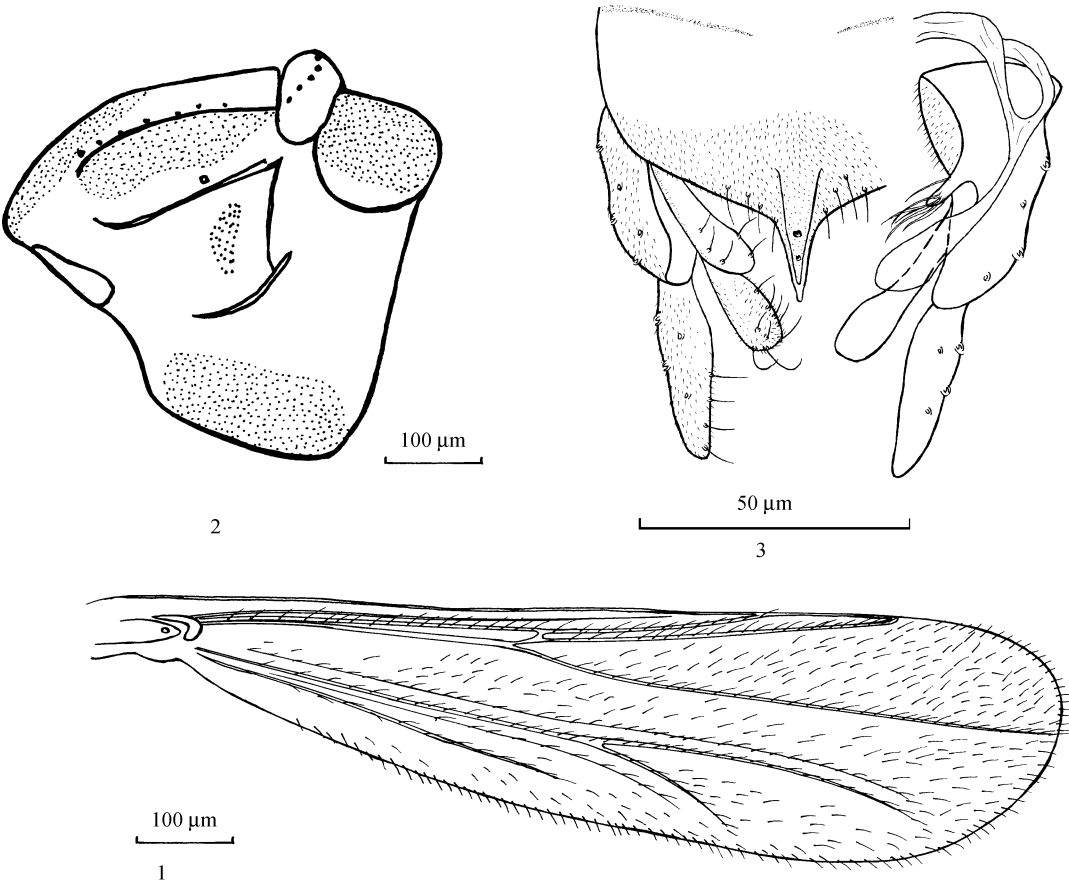
Hypopygium (Fig. 3). Anal tergite bands almost transverse, widely separated medially. Anal point triangular, with pointed apex and with pair of anal crests, and two spinulae between anal crests are present.

Anal point with 4 lateral setae on base. Transverse

Financial support from the National Natural Sciences Foundation of China (NSFC).

* Corresponding author, E-mail: xhwang@nankai.edu.cn

Received 7 Dec. 2006, accepted 28 Feb. 2007.



Figs 1-3 *Zarelia bragrenia* sp. nov., male imago. 1. Wing. 2. Thorax. 3. Hypopygium.

sternapodeme 40 µm long, without oral projections. Gonocoxite 70 µm long. Superior volsella oblong, 30 µm long, with 3 dorsal and 2 inner surface setae. Digitus absent. Stem of median volsella about 10 µm long, with 4-5 apical lamellae. Inferior volsella 40 µm long, basally narrow, distally dilated. Gonostylus 50 µm long. HR 1.40; HV 2.16.

Table 1. *Zarelia bragrenia* sp. nov. lengths (in µm) and leg ratios of legs.

	fe	ti	ta ₁	ta ₂	ta ₃	ta ₄	ta ₅	IR
P1	490	230	—	—	—	—	—	—
P2	480	360	240	100	70	56	40	0.67
P3	560	430	300	170	150	90	56	0.70

Distribution. The present species is known only from the type locality in Sichuan Province (Oriental Region).

Remarks. Among previously described species, the new species resembles *Z. pentatoma* Kieffer in the structure of the hypopygium, but the present species have smooth superior volsella and two spinulae between the anal crests, while *Z. pentatoma* is densely covered with spinulae between the anal crests and a superior volsella with dented margin.

Zardia bragrenia sp. nov. differs from all known

species of the genus in having no median long setae on the anal tergite. Therefore, the diagnosis of *Zarelia* by Cranston *et al.* (1989) should be emended to anal tergite with or without long setae medially.

Acknowledgements We are indebted to Prof. Ole Sæther (University of Bergen, Norway) and Dr. Eugeniy Makarchenko (Institute of Biology and Pedology of the Far East branch, Russian Academy of Sciences, Vladivostok, Russia) for their valuable comments on the paper. Mr. Ji Bing Chun made slides preparation.

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扎氏摇蚊属一新种记述 (双翅目, 摇蚊科, 长跗摇蚊族)

郭玉红^{1,2} 王新华^{1*}

1. 南开大学生命科学学院 天津 300071
2. 中国疾病预防控制中心传染病预防控制所媒介生物控制研究室 102206

摘 要 扎氏摇蚊属 *Zawdia* 世界上已有记录共计 7 种, 除了 *Z. kribiensis* Kieffer 分布于非洲区, *Z. chinovdsella* Guo & Wang (2004) 分布于东洋区外, 本属其它种都分布在全北区。本文记述了分布于中国东洋区的 1 新种——光裸扎氏摇蚊 *Z.*

bragenia sp. nov. 正模 ♂, 四川省峨眉山, 1986-05-17, 王新华采。本种与本属已知种的主要区别特征是: 肛节 (第 9) 背板不具中区长刚毛。文中对 Cranston 等 (1989) 提出的属征作了修订。新种模式标本保存于南开大学生命科学学院。

关键词 摇蚊科, 扎氏摇蚊属, 新种, 东洋区, 中国.

中图分类号 Q969.442.6

* 通讯作者, E-mail: xhwang@nankai.edu.cn